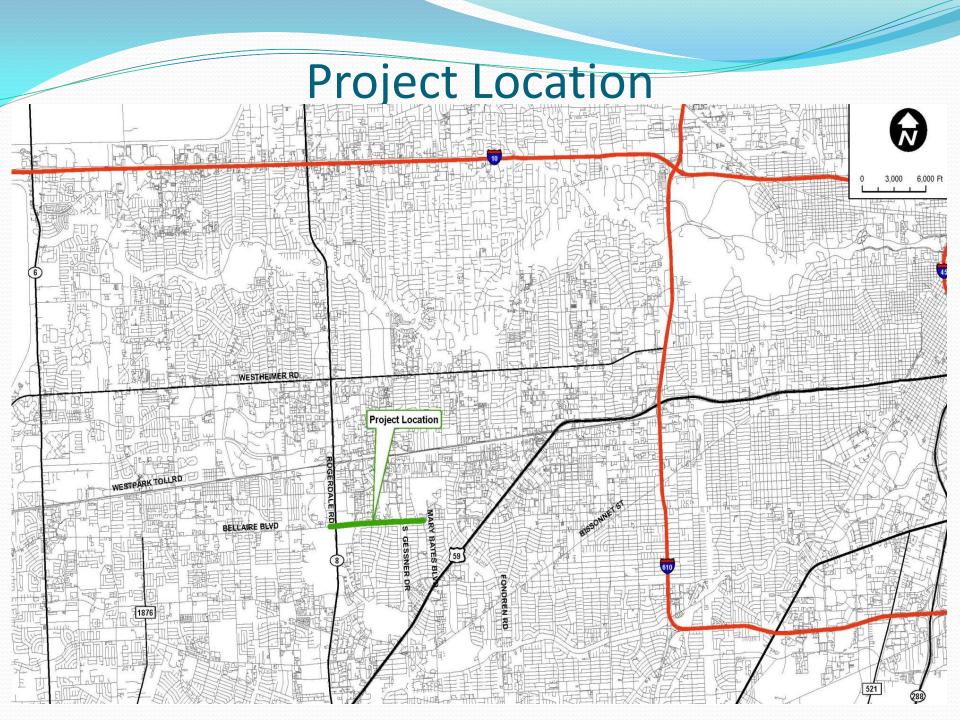
Bellaire Boulevard Access Management and Widening Project

(Rogerdale Road to Osage Street)



Background

The initial project as authorized by the Southwest Houston Redevelopment Authority included the following improvements:

- addition of a westbound lane
- addition of median channelizations
- increased turning bay capacity
- upgrades to the underground utilities
- hardscape and landscape enhancements along the corridor.

In early 2010, the project was revised to add full pavement reconstruction and a new water line.

Roadway Improvements

 Previous improvements included ONLY Median Channelization and addition of one westbound lane.

 New project will do the same plus reconstruct the entire section of roadway from bottom up and curb to curb

 Project will also add capacity to Beltway 8 Frontage Roads for additional turning movements

CenterPoint Gas Lines

- All costs to be incurred by CenterPoint Energy
- 12" gas line relocation along the South side of the Road from Beltway 8 to East of Corporate Drive
- Various relocations and deepening of 6" and 8" lines

AT&T/SWBT and Cable Lines

- All costs to be incurred by Utility Companies
- Various relocations and deepening of service connections
- Project will start concurrently with CenterPoint

Water

- 30" Distribution line Beltway 8 to Corporate
- 20" to 24" Distribution Line Corporate to Mary Bates
- Various service crossings throughout project

Sanitary Sewer

- 10" to 12" Collection line Various locations
- 24" Collection Line Kendalia to Gessner
- Various service crossings throughout project

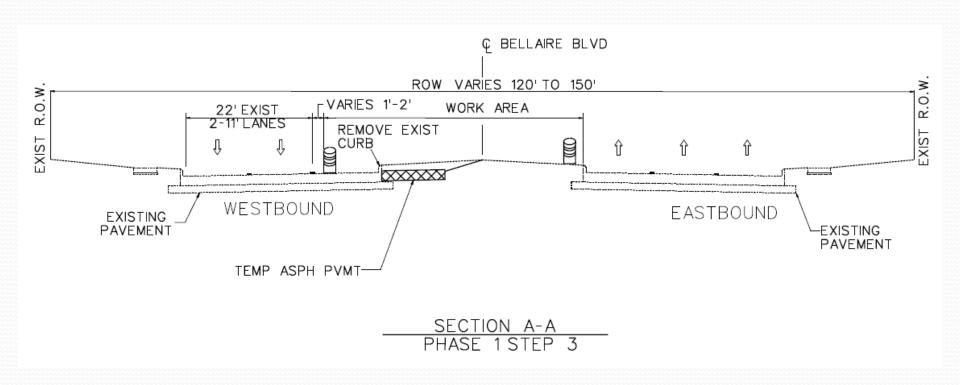
Storm Sewer/Drainage

- 48" to 66" Drainage Line Beltway 8 to Corporate
- 4' x 3' to 6' x 4' Drainage Box East of Corporate to East of Pella
- 30" to 36" Drainage Line Gessner to Harbor Town
- 84" to 96" Drainage Line Harbor Town to Osage
- All necessary inlets, catch basins and appurtenances

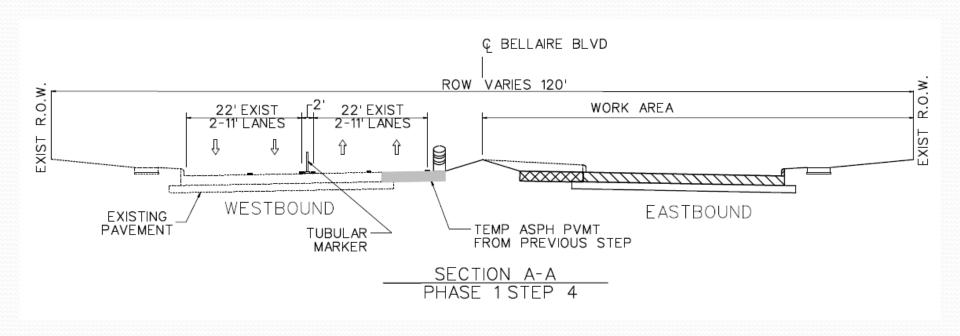
SEQUENCE OF CONSTRUCTION

- GAS AND TELEPHONE RELOCATION Complete Mid March
- WATER LINE
- STORM SEWER
- PAVING & TRAFFIC SIGNALS
- LANDSCAPING

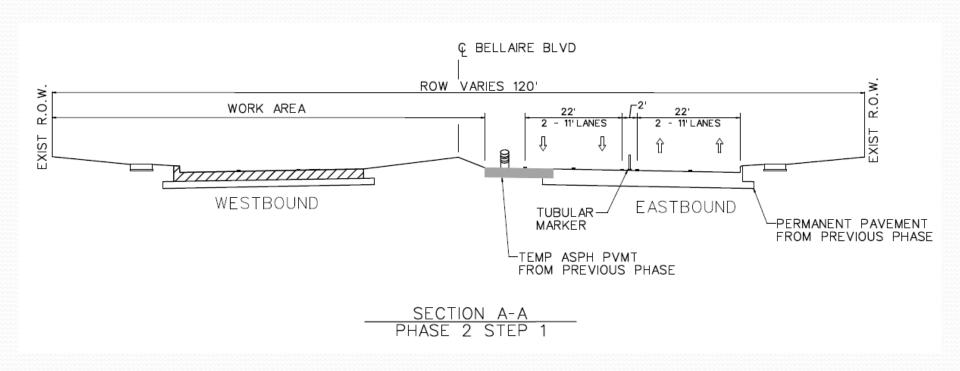
FIRST MAJOR PHASE TO ACCOMMODATE BUILDING EXTRA TEMPORARY PAVEMENT



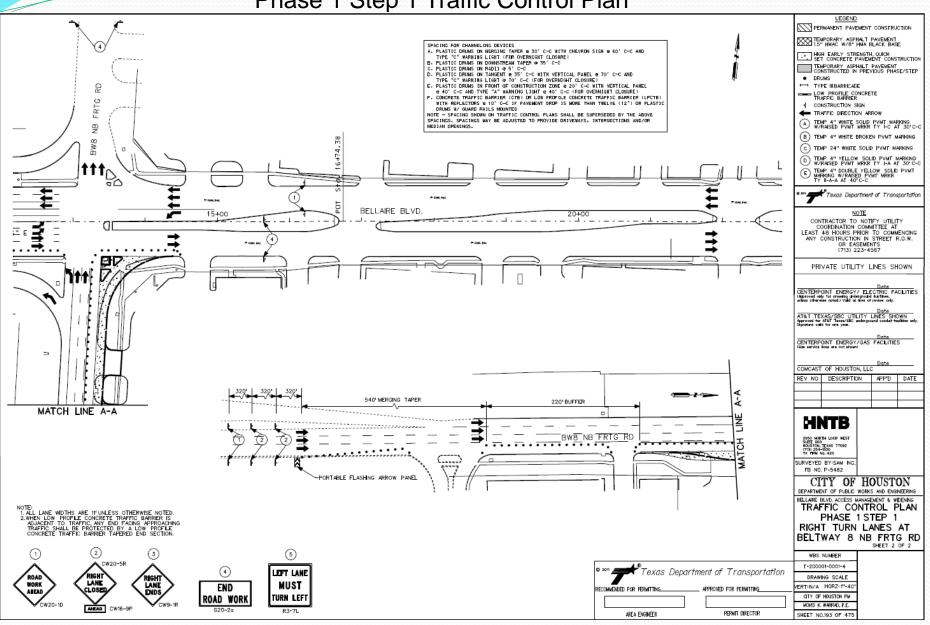
SECOND MAJOR PHASE MOVE TRAFFIC TO NORTH SIDE OF ROADWAY TO CONSTRUCT WATER LINES, DRAINAGE LINES AND PAVEMENT



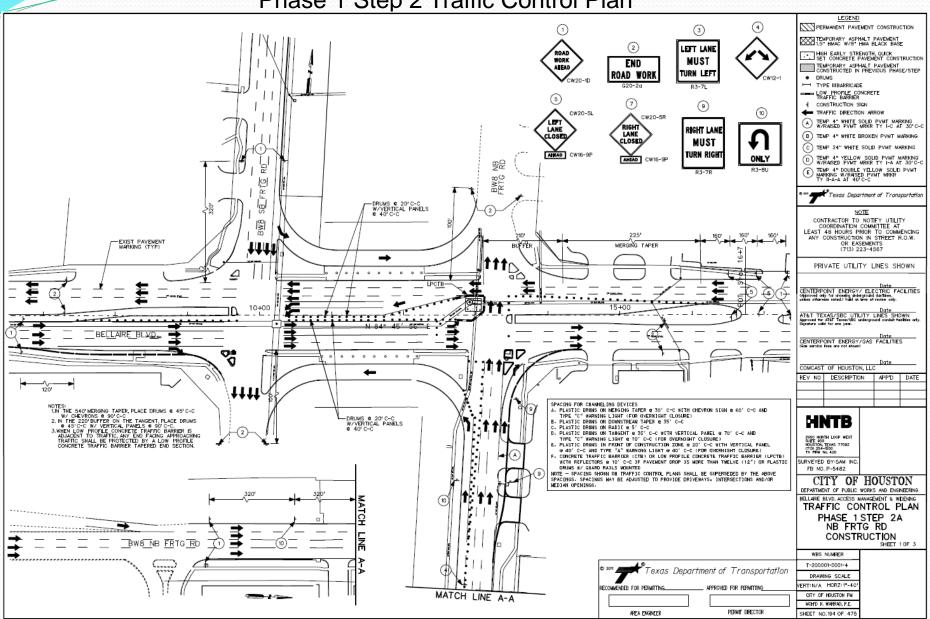
THIRD MAJOR PHASE MOVE TRAFFIC TO SOUTH SIDE OF ROADWAY TO CONSTRUCT DRAINAGE LINES AND PAVEMENT



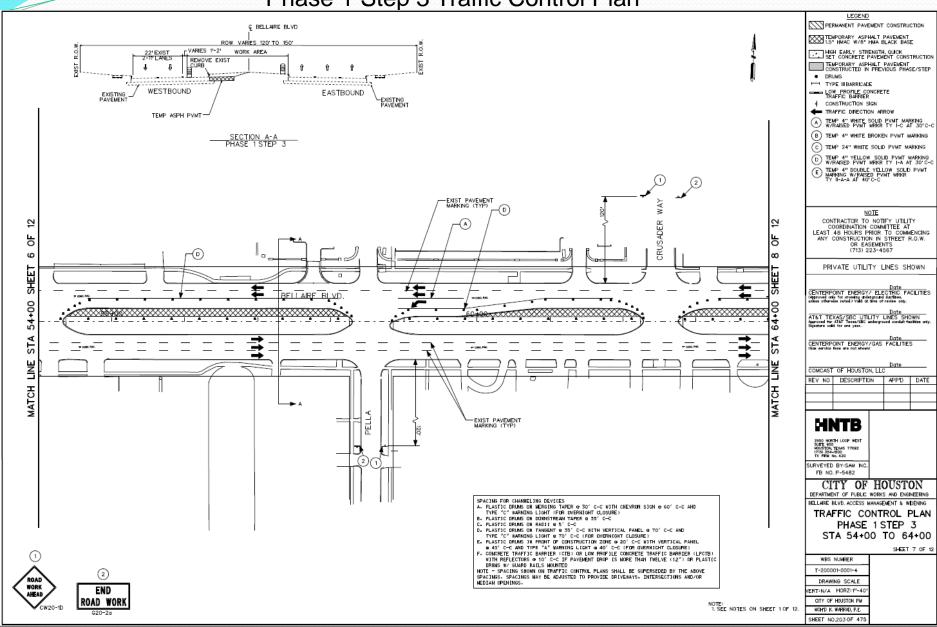
Phase 1 Step 1 Traffic Control Plan



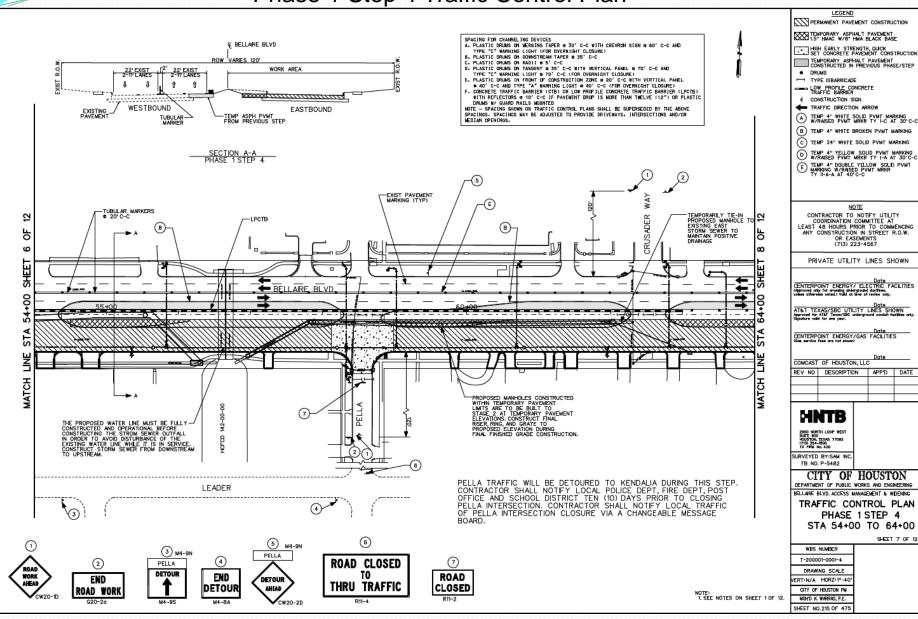
Phase 1 Step 2 Traffic Control Plan



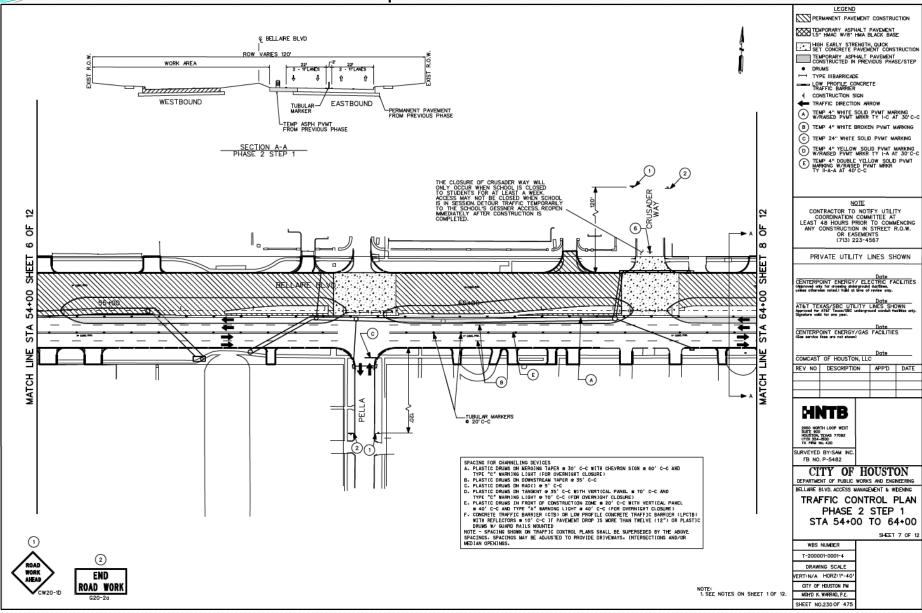
Phase 1 Step 3 Traffic Control Plan



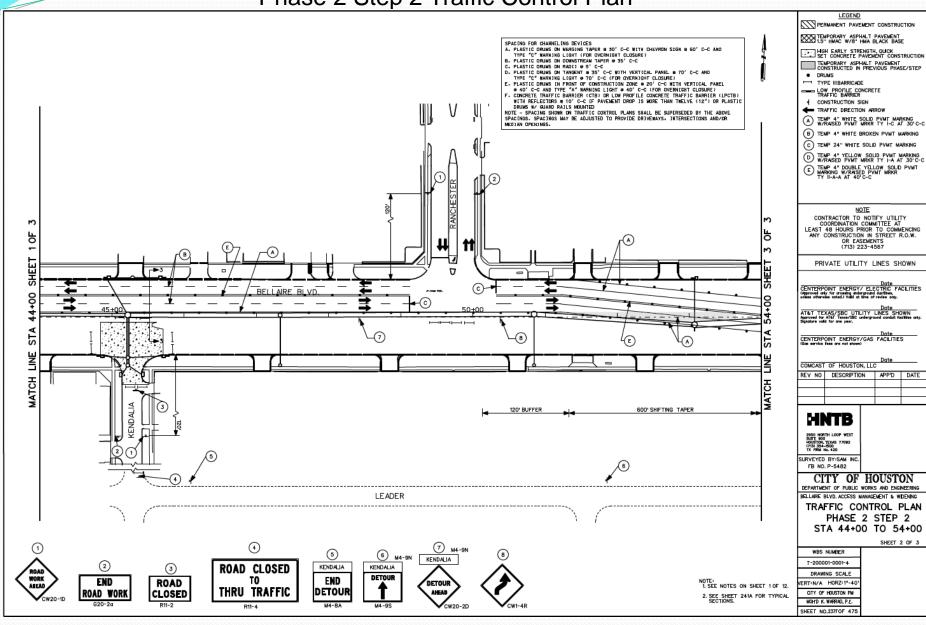
Phase 1 Step 4 Traffic Control Plan



Phase 2 Step 1 Traffic Control Plan



Phase 2 Step 2 Traffic Control Plan



Communication

- ADDITIONAL COMMUNICATION REQUIREMENTS BY THE CONTRACTOR
 - CANVAS OF PROJECT
 - COMMUNICATION TO CONSTITUENTS
 - Notifications
 - COMMUNICATION TO BOARD
 - Construction Representative
 - DRIVEWAY ACCESS SIGNAGE (See next slide)

Similar Driveway Access Signage



Access Management During Construction

- Cross Street access are maintained at all times with reduced lanes and temporary traffic signals
- Side Street alternate side streets will be closed with detours to the next nearest side street access
- Driveway access are to be maintained at all times. Any driveway closures for construction must be coordinated with the property owner a minimum of 7 days prior to closure.
- Use of off-duty peace officers and certified flaggers, especially at schools

SCHEDULE

	BELLAIRE BLVD ACCESS MANAGEMENT AND WIDENING - PRELIMINARY CONSTRUCTION SCHEDULE											
	Jan-2012	Feb-2012	Mar-2012	Apr-2012	May-2012	Jun-2012	Jul-2012	Aug-2012	Sep-2012	Oct-2012	Nov-2012	Dec-2012
GAS LINE / UTILITY RELOCATION	•								•			
ADVERTISEMENT												
AWARD												
TEMPORARY PAVEMENT												
WATER & SANITARY												
DRAINAGE												
ROADWAY												
MISC ITEMS												
LANDSCAPE / HARDSCAPE												

1	BELLAIRE BLVD ACCESS MANAGEMENT AND WIDENING - PRELIMINARY CONSTRUCTION SCHEDULE											
	Jan-2013	Feb-2013	Mar-2013	Apr-2013	May-2013	Jun-2013	Jul-2013	Aug-2013	Sep-2013	Oct-2013	Nov-2013	Dec-2013
WATER & SANITARY												
DRAINAGE												
ROADWAY												
MISC ITEMS												
LANDSCAPE / HARDSCAPE		·										

	BELLAIRE BLVD ACCESS MANAGEMENT AND WIDENING - PRELIMINARY CONSTRUCTION SCHEDULE											
	Jan-2014	Feb-2014	Mar-2014	Apr-2014	May-2014	Jun-2014	Jul-2014	Aug-2014	Sep-2014	Oct-2014	Nov-2014	Dec-2014
WATER & SANITARY				•								
DRAINAGE												
ROADWAY												
MISC ITEMS												
LANDSCAPE / HARDSCAPE												

No Construction allowed during the December Holiday Season and Chinese New Year (Mid-December to Mid-February)

Projected Construction Costs

WATER AND SEWER = \$4.8 M

• DRAINAGE = \$2.0 M

ROADWAY = \$5.2 M

LANDSCAPE/HARDSCAPE = \$2.7 M

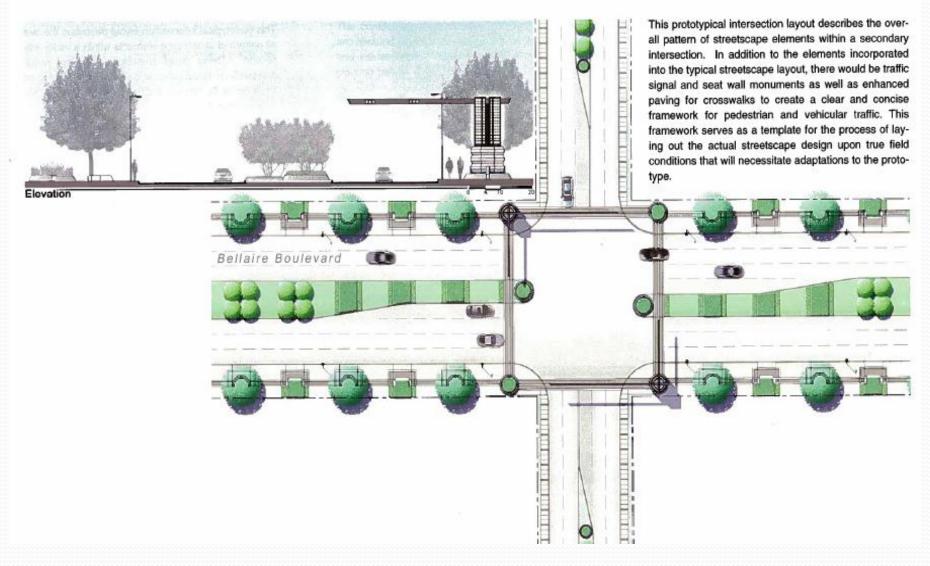
OTHER GENERAL ITEMS = \$7.0 M

(Removal of structures, Traffic/Ped Signals, HCTRA Fiber)

- TOTAL CONSTRUCTION COSTS = \$21.7 M
- TOTAL ENGINEERING AND OTHER = \$3.3 M

• TOTAL ALL PROJECT COSTS = \$ 25.0 M

Typical Intersection Improvements



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